

CLAIMS

1. Peripheral device comprising:
 - a functional unit which carries out a function based on commands from main device;
 - a power control section which controls power consumption of said functional unit;
 - a power profile information memory which memorizes a power profile information list that includes single or plural power profile information;
 - and an interface section which sends and receives said power profile information and commands relevant to the functional unit to and from said main device;

wherein said interface section corresponds to the demand from said main device and sends said power profile information list to said main device;

and said power control section controls power consumption of said functional unit by corresponding to the selected information of said power profile information that was received from said main device.
2. Peripheral equipment comprising:
 - a functional unit which carries out a function based on commands from main device;

a power profile register which memorizes power profile information;

a power control section which controls power consumption of said functional unit;

a power profile information memory which memorizes a power profile information list that includes single or plural power profile information;

and an interface section which sends and receives said power profile information and commands relevant to the functional unit to and from said main device;

wherein said interface section corresponds to the demand from said main device and sends said power profile information list memorized in said power profile information memory to said main device,

and corresponding to the selected information of said power profile information that was received from said main device, stores the corresponding power profile information from said power profile information memory, in said power profile register;

and said power control section deciphers said power profile information stored in said power profile register and controls power consumption of said functional unit based on said deciphered power profile information.

3. Peripheral equipment comprising:

a functional unit which carries out a function based on commands from main device;

a power profile information memory which memorizes a power profile information list that includes single or plural power profile information;

an interface section which sends and receives information regarding the range of power profiles which said main device designated or power profiles which said main device allowed or commands relevant to the functional unit to and from said main device;

a power profile judgment section which extracts said power profile information that is the same or approximate to power profile designated or allowed by said main device from the above-mentioned power profile information list stored in the above-mentioned power profile information memory;

a power profile register which memorizes said power profile information that is extracted by said power profile judgment section;

and a power control section which controls power consumption of said functional unit;

wherein said interface section sends information regarding the range of power profile which

said main device designated or allowed, wherein information is sent from said main device, to said power profile judgment section;

and said power control section deciphers said power profile information stored in said power profile register and controls power consumption of said functional unit based on said deciphered power profile information.

4. Peripheral equipment in accordance with claim 3, wherein said power profile judgment section changes said power profile information to be stored in power profile register based on a value of voltage sent from said main device.

5. Peripheral device in accordance with any one of claim 1 to claim 4, wherein said power profile information has at least one of the following maximum output value of a power amplifier, transmission rate of a wireless communication, or in use or not of said functional unit, as its element; and said power control section controls power consumption of said functional unit in regard to said element of said power profile register.

6. Main device which demands power profile

information to said peripheral device, wherein power profile information includes single or plural power profile information that is information for peripheral device to control power, selects single power profile information which is appropriate for the main device from said power profile information list sent from said peripheral device, and sends the selected information of selected power profile information to said peripheral device.

7. Main device in accordance with claim 6, wherein various said power profile information is determined corresponding to the value of power supply voltage.

8. Main device in accordance with claim 6, wherein said power profile information has at least one of the following maximum output value of a power amplifier, value of clock frequency of a functional unit, or in use or not of said functional unit, as its element.

9. Control method of peripheral device comprising:

a sending step of corresponding to a demand from main device and sending a power profile

information list which includes single or plural power profile information to said main device;

a receiving step of receiving the selected information of power profile information which is sent from said main device;

and a power controlling step of controlling power consumption of functional unit corresponding to the selected information of said power profile information.

10. Control method of peripheral device comprising:

a sending step of corresponding to a demand from main device and sending a power profile information list which includes single or plural power profile information to said main device;

a receiving step of receiving the selected information of power profile information which is sent from said main device;

a memorizing step of extracting and memorizing said power profile information which corresponds to said selected information of power profile information from the power profile memory;

and a power controlling step of deciphering said power profile information and controlling power consumption of functional unit based on said

deciphered power profile information.

11. Control method of peripheral device comprising:

a receiving step of receiving information regarding the range of power profiles which said main device designated or power profiles which said main device allowed;

a power profile judging step of extracting said power profile information that is the same or approximate to power profile designated or allowed by said main device from power profile information list which includes single or plural power profile information that is stored in power profile information memory;

and a power control step of controlling power consumption of a functional unit based on said extracted power profile information.

12. Control method of main device which demands power profile information to said peripheral device, wherein power profile information includes single or plural power profile information which is information for peripheral device to control power, selects single power profile information which is appropriate for main device from said power profile information list

sent from said peripheral device, and sends the selected information of selected power profile information to said peripheral device.

13. Program to make the computer execute control methods of peripheral device in accordance with claim 9 or claim 10.